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DIRECTORATE OF  
INTELLIGENCE

# Intelligence Memorandum

*Communist China: An Overview of the Economy*

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ER IM 71-203

October 1971

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**CENTRAL INTELLIGENCE AGENCY**  
**Directorate of Intelligence**  
**October 1971**

**INTELLIGENCE MEMORANDUM**

**COMMUNIST CHINA: AN OVERVIEW OF THE ECONOMY**

Conclusions

In the 1970s, Communist China's growing economic strength will be applied largely to industrial and military modernization, and its international economic role is likely to remain small.

China's economic strategy for the 1970s calls for a strong push in domestic investment. Indeed, this program is well under way as evidenced by the surprising number of industrial projects at various stages of construction – for example, iron and steel complexes, petroleum refineries, aluminum plants, and shipyards. Simultaneously, the leadership is faced with the high costs of serial production and large-scale deployment of missiles and other modern weapons systems. The agricultural sector, which must feed a growing population at gradually higher standards, needs additional support from industry and will be hard put to increase its volume of export goods in the next few years. Since China's exports consist largely of raw and manufactured agricultural products, the growth of foreign trade will be relatively slow.

Japan will continue to be China's natural trading partner because of geographical nearness, cultural ties, and a suitable offering of goods and technology. If the Chinese become less sensitive to the presence of foreign technicians, the Japanese can supply on-the-spot assistance in building new industrial capacity and developing natural resources, notably petroleum. Such a development would underscore China's subordinate role in the international economic arena.

As for the United States, the potential for US-China trade is limited by several factors. China's foreign trade is small in relation to total output

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*Note: This memorandum was prepared by the Office of Economic Research and was coordinated within CIA.*

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and is likely to grow only slowly because of Peking's policy of economic self-sufficiency, its conservative attitude toward foreign indebtedness, and its limited range of export goods. And China already has well-established trading relationships with low-cost suppliers of its major import needs -- grain from Canada and Australia; and capital goods, metals, and fertilizers from Japan and Western Europe. Despite these limitations there are obvious possibilities for growing US-China commercial relationships because of a US comparative advantage in high-technology industries -- such as aircraft, advanced computers, petro-chemical equipment, and offshore drilling equipment -- and the existence of a high-income US market for Chinese luxury items.

In general, China will continue to depend on the outside world for new technology and modern machinery in the 1970s. China enters the international arena as a back runner in the technological race. To be sure, China will draw rapidly ahead of other large low-income nations, such as India and Indonesia, which lack internal momentum in investment and are burdened by crushing international debts. At the same time, China will be rapidly falling behind its neighbor Japan in total and per capita output since the Japanese economy is growing at least twice as fast on a far larger base. All the leading industrial nations will be devoting substantial resources to research and development and to the modernization of their industrial facilities. China with its heavy commitment to defense will be hard-pressed not to fall farther back of the international pace-setters.

Purpose of the Memorandum

The purpose of this memorandum is to set forth the strengths and weaknesses of the economy of Communist China as they affect China's ability to project its power into the international arena. The memorandum provides an overview of the Chinese economy -- its resources, its pattern of growth, and its place in the world economy. Appendixes contain a chronology of economic events in Communist China, estimates of key economic indicators, answers to questions frequently asked about the Chinese economy, and comparisons with other economies.

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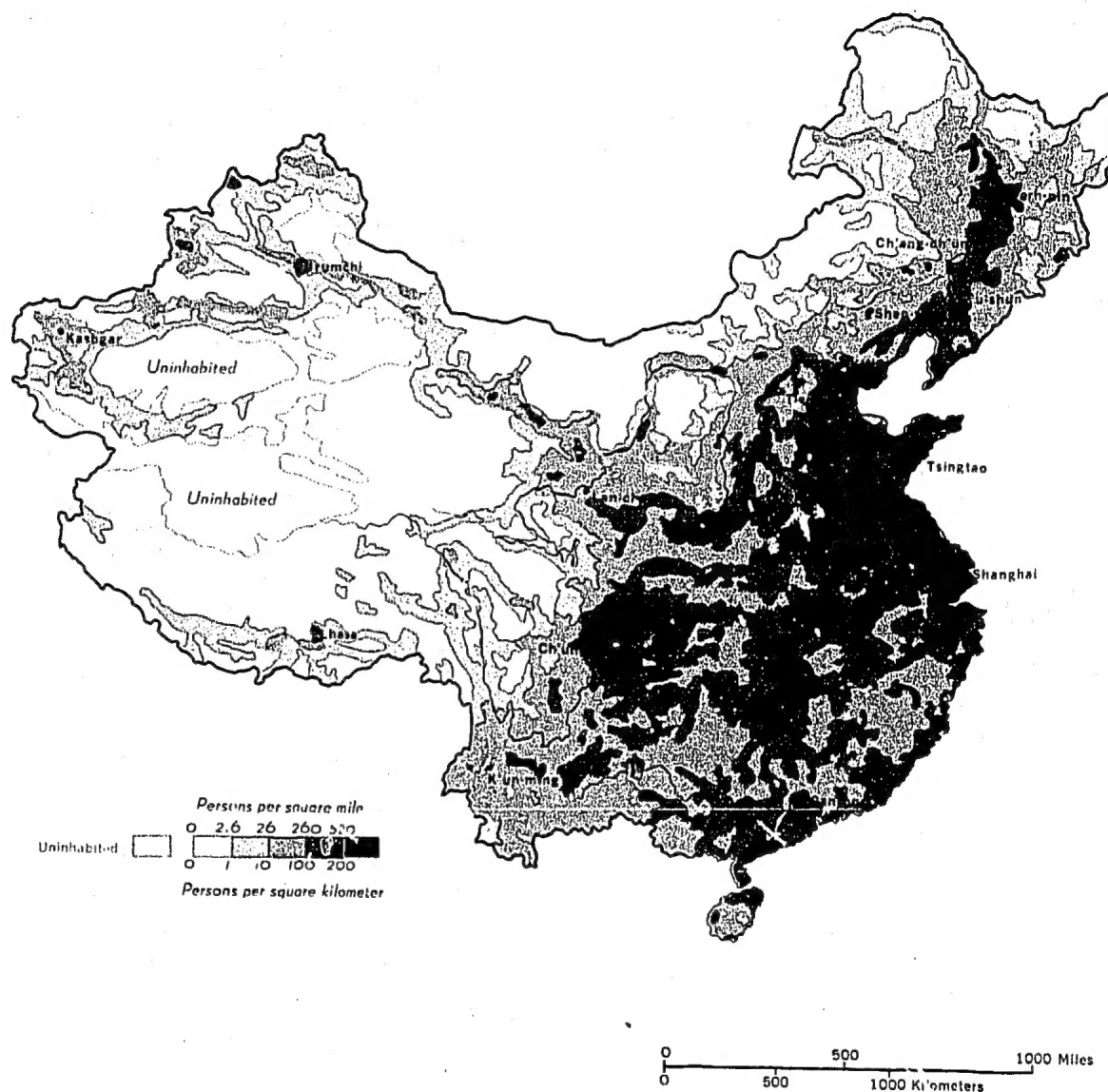
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# Population



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## I. RESOURCES FOR ECONOMIC GROWTH

## Manpower Resources

China's huge manpower resources are uniquely suited for both military and economic development purposes.

The government needs to draft only 10% of the 10 million males reaching military age each year in order to maintain its three-million-man Peoples Liberation Army (PLA). Thus only males in prime health and of unquestioned loyalty to the regime are inducted. The proportion of active-duty military personnel in the total population is only one-quarter as great as in the USSR or the United States. China's abundant manpower is reflected also in the availability of tens of millions of reservists, militia, and members of the paramilitary Production and Construction Corps, which engages in construction projects and agricultural reclamation in frontier areas.

In terms of suitability for economic development, the basic character of the Chinese people is probably unsurpassed anywhere in the world. The average Chinese is quick to learn, industrious and frugal, reasonably healthy, and well-motivated to improve his material lot. The population is homogeneous except for the 6% made up of minority nationalities living in the border areas. Communist China for the most part has been spared the racial and religious bloodbaths of India and other less developed countries.

The geographical distribution of the population is extremely uneven, as shown on the map. The river valleys, coastal plains, and low hills of the eastern third of the nation contain 90% of the population.

Although the quality of manpower is a distinct asset, China would be better off with fewer people. The enormous population growing at 2.2% per year poses formidable problems of feeding and clothing — even at the austere levels which the Peking government has maintained over the past 20 years. Birth control measures have been sporadic and so far have made no appreciable dent in the population structure.

Estimated and Projected  
Midyear Population

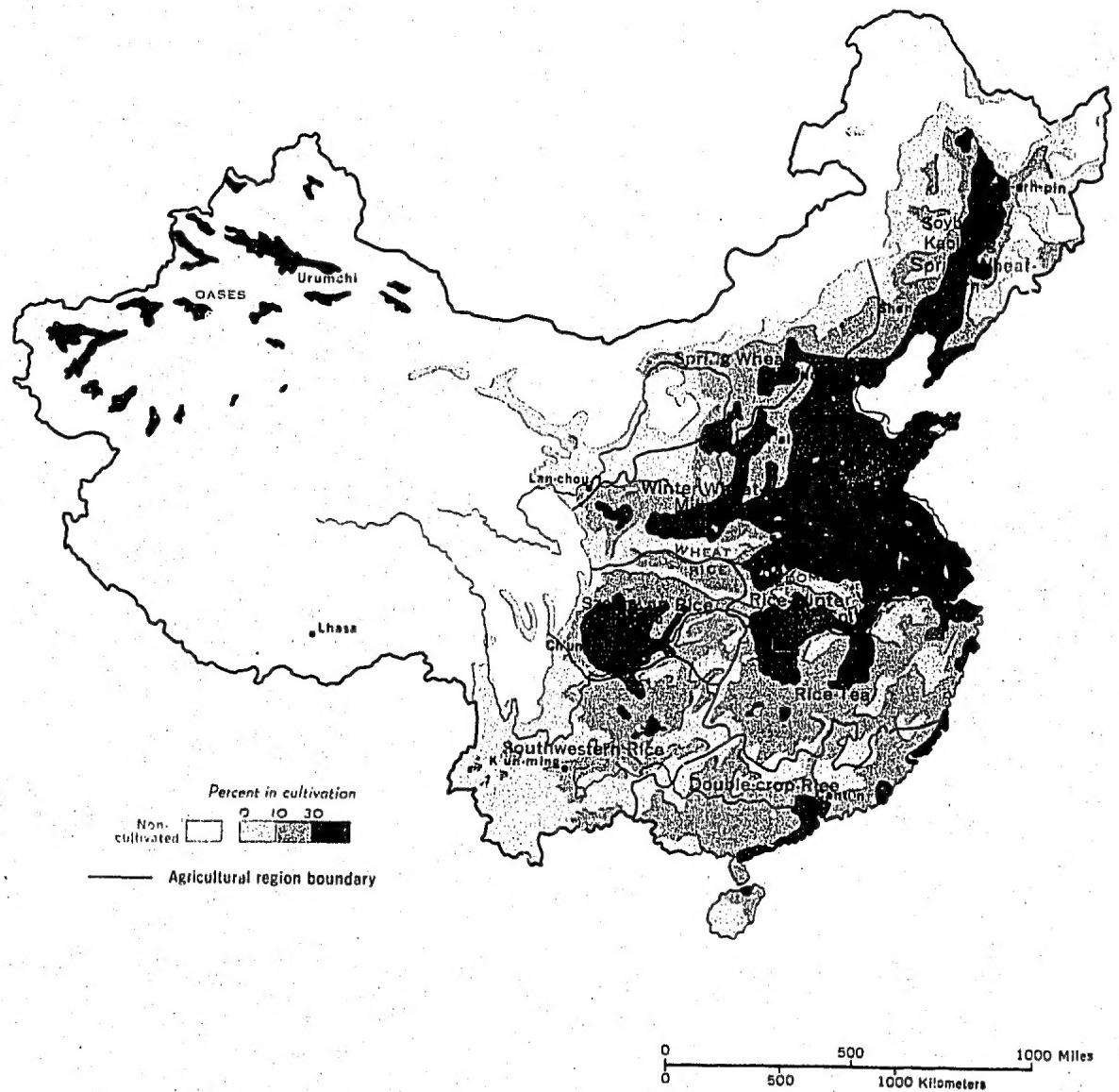
<u>Year</u>	<u>Million Persons</u>
1945	510
1950	547
1955	611
1960	689
1965	751
1970	836
1971	855
1975	937
1980	1,054

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# Agriculture



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**SECRET**Agricultural Resources

China's agricultural resources, while large in absolute terms, are small in relation to the population and to the needs of the economy for export goods and raw materials for industry.

Because of rugged terrain and lack of moisture in the western two-thirds of China, cultivation is largely confined to the eastern third. The eastern portion is divided into the predominantly wheat areas of the north and the predominantly rice areas of the south, as shown on the map. Only about 415,000 square miles - or 11% of the total land area of 3.7 million square miles - is under cultivation. The effective cultivated acreage is increased by 50% through multiple cropping.

Additional land, perhaps 3% of the total land area, could be brought under cultivation, but only at tremendous cost. At the same time, the development of urban areas, new transportation routes, and military installations is nibbling away at existing agricultural acreage.

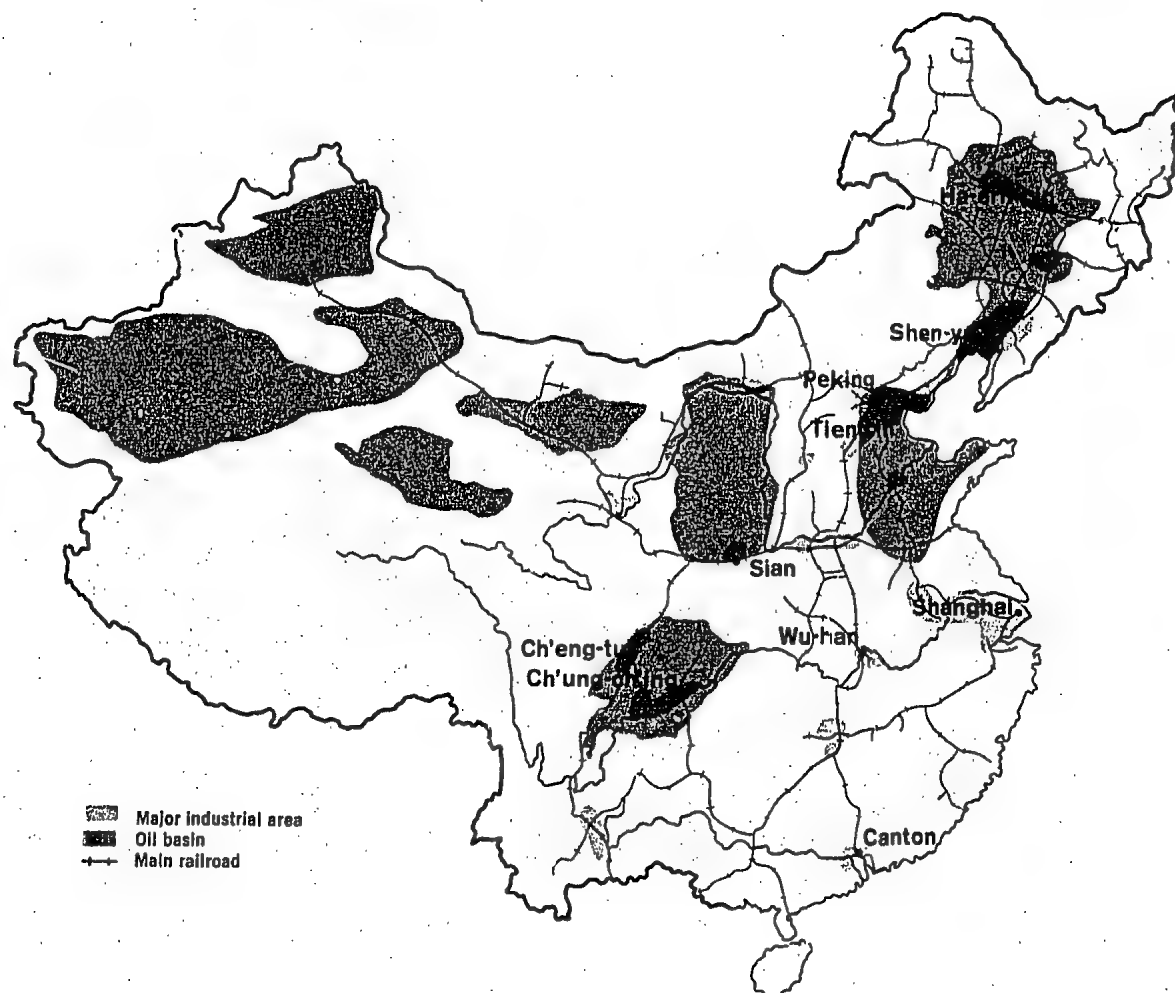
Centuries of intensive agricultural use have resulted in the stripping of China's forest cover, the exhaustion of much of the land, and the drop in water tables and alkalization of extensive acreage through overuse of water supplies. This has left the land even more vulnerable to flood and drought. The Communist government has made substantial gains in afforestation, control of water resources, and restoration of the fertility of the land. Beginning in 1962, the government has provided increasing amounts of chemical fertilizer, pesticides, irrigation pumps and piping, and improved seeds to the agricultural sector. The recurring periods of political upheaval have prevented the government from reaping the full benefits of these policies.

Because of the continuing growth of population and the importance of agricultural products as raw materials for industry and as export goods, the government will need an even stronger effort to improve agricultural resources in the 1970s. This effort will center on the increase in yields from existing land through more fertilizer, better water management, and improved seeds. These improvements in China's agricultural resources will be at a relatively simple technological level appropriate to China's needs; it may be a decade before China can achieve the more advanced technology and higher yields of, for example, Taiwan and Mexico.

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# Industry



Major industrial area  
Oil basin  
Main railroad

0 500 1000 Miles  
0 500 1000 Kilometers

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### Industrial Resources

China has the energy resources and mineral deposits of a superpower but lacks the capital plant and technological skill to compete with the United States and the USSR on a global scale.

In energy resources, China has huge coal reserves, the world's largest hydroelectric potential, and extensive oilfields which are being rapidly developed. In metals, China's reserves of tungsten, tin, and antimony are the world's largest; sizable deposits of iron, manganese, and aluminum ores also have been found. However, reserves of three key alloying metals - chrome, nickel, and cobalt - are inadequate, and supplies must be imported. Finally, China remains heavily dependent upon imports for its supply of natural and synthetic rubber.

Most of China's modern capital plant is located in the major industrial areas shown on the map. The concentration of manufacturing capacity in the northeast (the former Manchuria) and in the eastern port cities is a carryover from the pre-Communist era. Peking's strategy has been to build upon this inherited base while at the same time developing - for strategic and "local self-reliance" objectives - new industrial areas in the hinterland.

The region stretching northeastward from Shen-yang (the former Mukden) to Ha-erh-pin is China's largest producer of petroleum, coal, electric power, steel, aluminum, cement, trucks, and railroad equipment. It also is a major producer of machine tools and armaments. Shanghai, on the east coast, is the country's largest industrial metropolis and a leading manufacturer of textiles, pharmaceuticals, chemical fertilizer, tires, steel, electronic and electrical equipment, machine tools, and merchant and naval shipping.

Peking has been extensively developed as a production base for missiles, land armaments, electronic equipment, machine tools, textiles, and agricultural machinery. West of Shanghai is the Wu-han area, important for steel, heavy machinery, and naval shipbuilding. The Ch'ung-ch'ing region produces steel, machine tools, and artillery. Representative of other fast-growing hinterland cities are Ch'eng-tu (jet aircraft, electronic equipment, and instruments) and Sian (jet aircraft, small arms, electrical equipment, and textiles).

In addition to the large industrial plants controlled by central ministries, the Communist government has supported the development of small and medium-sized plants to serve local needs. These plants typically produce cement and other construction materials, low-grade chemical fertilizer, small motors and other simple equipment, and consumer goods.

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**SECRET****II. THE PATTERN OF ECONOMIC GROWTH****Trends in the Gross National Product**

Overall economic growth under Communist rule has been fairly strong but erratic.

China's gross national product (GNP) has doubled since 1952, reaching a level of \$119 billion in 1970, or \$143 per capita. The severe economic damage resulting from the Great Leap Forward (1958-60) -- a disastrous attempt at instant industrialization -- shows up clearly on the top chart at the right. In contrast, the damage from the political upheavals of the Cultural Revolution (1966-69) was relatively mild.

The long-term annual growth rate of GNP has been about 4%. Since population has grown at an average rate of slightly more than 2%, the growth in per capita GNP has averaged about 2%. Agricultural output since 1952 has approximately matched the growth rate of population. In contrast, industrial production since 1952 has grown at an 8% average rate, or 6% if the larger 1957 base is used.

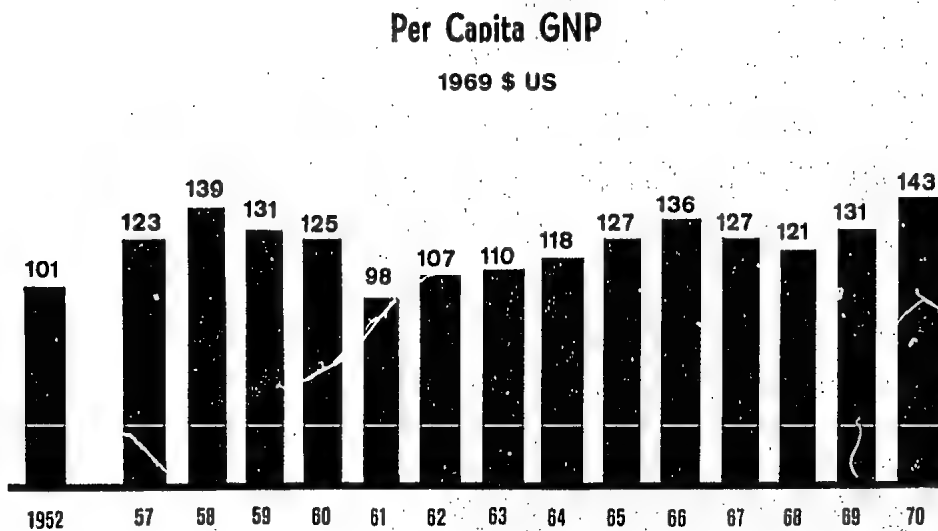
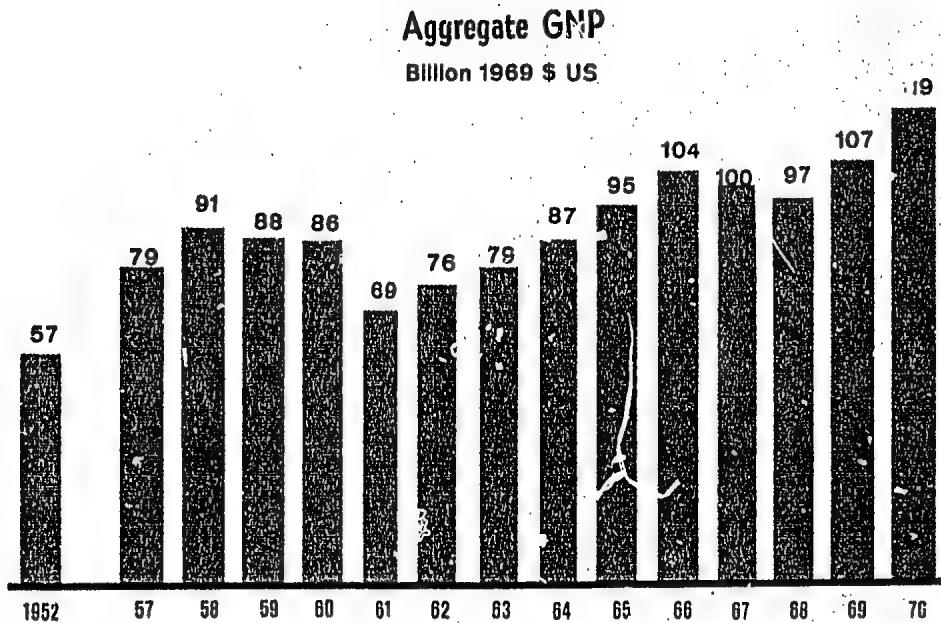
China is no ordinary less developed country with a per capita GNP of \$100 or less. Rather, it may be considered as an economy with, say, a \$100 "basic maintenance" sector and a \$43 "development thrust" sector. That is, \$100 is needed simply to maintain the population at reasonable minimum standards, with \$43 left over for industrial investment and development of advanced weapons. As the bottom chart shows, China moved well above the \$100 per capita level by 1957, fell back precipitously as a result of the Leap Forward, and now is forging ahead with a slowly widening margin.

Prospects for substantial economic growth in the early 1970s are good, assuming no new flare-up of radical economic policies or a prolonged spell of unfavorable weather in agriculture. Agriculture should stay abreast of population growth, and industrial production should increase in the range of 5% to 10% annually. The following favorable factors for growth have been clearly identified:

- a vigorous program of construction of industrial facilities, many in the interior provinces;
- a substantial flow of machinery and technology from Japan and the leading industrial nations of Western Europe;
- a steady increase in chemical fertilizer and pumps and other equipment going to agriculture; and
- the restoration of the purged administrative structure to normal functioning together with the return to comparatively moderate economic policies.

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## Gross National Product



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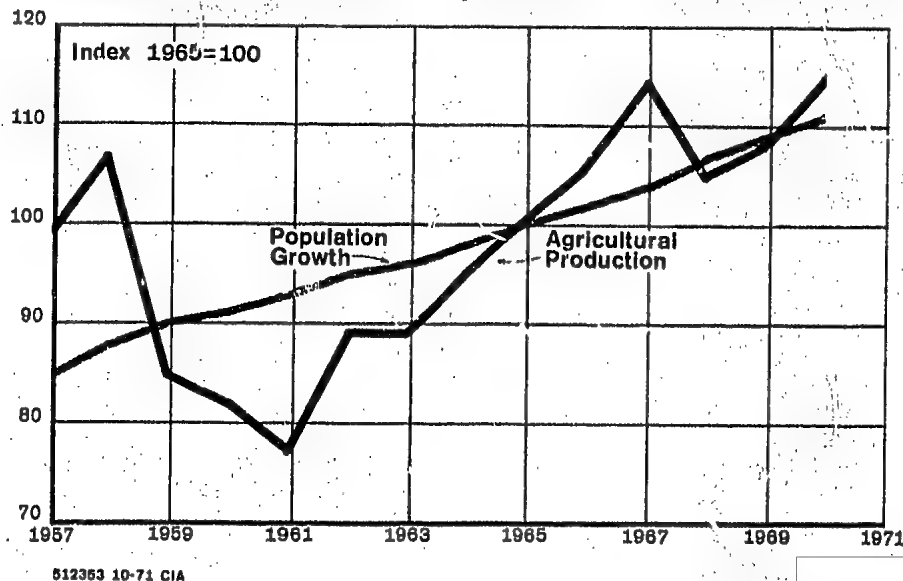
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**SECRET**Agricultural Production

Since 1962, agricultural production has benefited from a combination of favorable weather, larger supplies of fertilizer and equipment; and a permissive attitude toward private plots and rural markets.

**Population Growth and Agricultural Production**

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The Communist leadership originally counted on collectivization to boost agricultural production rather than on large-scale capital investment. A sweeping "land reform" program which parceled the land out to the peasants was only the prelude to forcible collectivization of agriculture, and by 1957 the countryside had been organized into 750,000 agricultural producer cooperatives. Collectivization was followed in 1958 by the formation of 26,000 supercollectives -- the so-called "communes" -- which were to mobilize China's vast labor force for industrial and construction tasks as well as for agriculture.

The unwieldy nature of the commune plus three years of unfavorable weather caused agricultural production to plummet in 1959-61. By the winter of 1960-61, China was near starvation, and discontent had spread even to the armed forces. As suggested by the chart, the already meager ration was reduced by 25% or more over wide areas.

Threatened with the loss of control over China, the Communist leadership moved quickly to restore the situation by:

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- opening food stocks and arranging for the annual import of 4-5 million tons of grain, starting in 1961;
- decentralizing agricultural decisions to smaller organizational units, i.e., the production brigade and the production team;
- restoring the small private plot and permitting small-scale private trade in rural products; and
- initiating a program of investment which has greatly increased the flow to agriculture of chemical fertilizer, electric power, pumps and other equipment, and improved seeds.

This dramatic turnabout in policy, together with favorable weather, led to record levels of production in the late 1960s.

In addition to feeding the population, the agricultural sector is expected to supply raw materials for industry and for export. One result is a continuing competition between grain and cotton for the available acreage. At present, sufficient cotton is being grown to provide a basic ration of about five linear meters of cloth a year - enough for a simple outfit of tunic and trousers - and to furnish a substantial volume of cotton textile exports. As for food exports, China typically exports foods that have a high unit value while importing basic grains, primarily wheat.

Over the next few years, agricultural production can continue to expand gradually under the present policy of increased inputs to agriculture and a reasonably permissive attitude toward private activity. Peking no doubt will continue its efforts to reduce the amount of centrally controlled resources used in agriculture by encouraging the growth of local industry, by strengthening the birth control program, and by resisting pressures for a higher payout to the peasants.

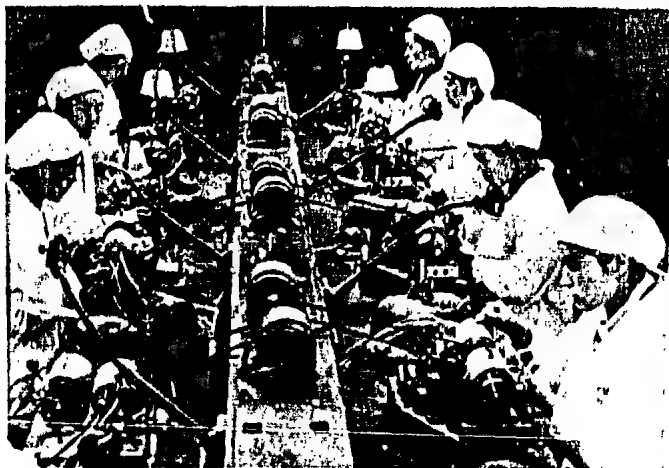
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### Representative Industrial Activities



Feeder bell for blast furnace being machined by a large vertical lathe at the Shen-yang Heavy Machinery Plant (Northeast China)



Miniature bearings being ground to close tolerances at a factory in Shanghai (East China)



Nitrogen fertilizer being produced by a small chemical fertilizer plant in Fukien Province (South-east China)



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Industrial Production

The volume and variety of industrial products have increased markedly since 1949, but China still is far behind the leading industrial nations in most branches of industry.

In the 1950s, the new government gave priority to building up the capacity and output of basic industrial fuels and materials. This priority has been maintained up to the present as shown by the following estimates of the output of key industrial products:

	<u>1952</u>	<u>1957</u>	<u>1970</u>
Steel (million metric tons)	1.35	5.35	17
Coal (million metric tons)	66.5	130.7	300
Electric power (billion kilowatt hours)	7.3	19.3	60
Crude oil (million metric tons)	0.44	1.46	18
Cement (million metric tons)	2.86	6.9	13

The groundwork for large-scale production of machinery and armaments also was laid in the 1950s. Subsequently, the Chinese have mastered the production of several types of precision machine tools, a remarkable variety of electronics equipment (including computers, radar, and communications equipment), transportation equipment (including heavy-duty trucks and diesel locomotives), and modern weapons of both Soviet and Chinese design. The expansion of light industry - which provides the Chinese with simple everyday consumer goods and is an important source of export earnings - has proceeded at a slower pace.

The organization of industry reflects the normal practices of a centralized "command economy." The State Council, the highest government administrative body, translates the policy guidelines of the Party into specific directives; these orders are then carried out through a bureaucratic hierarchy of planning commissions, industrial ministries and departments, and industrial enterprises.

Large plants, controlled by the central ministries, account for most of China's modern industrial production. A host of medium-size and small plants, which process local raw materials at a simple level of technology, are controlled by local governmental units. Supplementing the efforts of the regular industrial plants is the activity of tens of millions of full-time or part-time handicraft workers, who fill the interstices of the industrial sector by satisfying those small needs that escape the planners' attention.

**SECRET****Iron and Steel**

The rapid development of the iron and steel industry has propelled China into eighth place in world steel production - far behind the United States, the USSR, and Japan but well ahead of India.

Soviet equipment and technical aid were instrumental in the rapid growth of steel capacity and production in the 1950s. During the Leap Forward (1958-60), however, over-intensive use of equipment and the commissioning of 650,000 primitive "backyard furnaces" brought the orderly development of the industry to a halt. Most of the "backyard" product was unusable, and by 1961 many of the industry's major facilities had to be shut down for extensive repairs. After the abandonment of the Leap Forward, capacity and production were built up in rational fashion, with output of steel reaching 13 million tons in 1966. Following another sharp but short-lived drop in output during the Cultural Revolution, the industry today is moving ahead with a vigorous program of expansion and modernization.

The iron and steel industry is located primarily near major deposits of iron ore and coking coal, which are widely distributed throughout the eastern half of the country. The principal production facilities are located at An-shan - the old Manchurian center which produces 30% of China's steel - Shanghai, Wu-han, and Pao-t'ou. Other large facilities are being built or expanded mainly in interior industrial areas.

China's capacity for finishing steel has grown more slowly than crude steel production and does not provide a full assortment of shapes, sizes, and qualities of product. China is particularly dependent on imports of some kinds of tubing, sheet steel, and alloy steels. Moreover, in the last few years China has changed from a net exporter of pig iron to a net importer, evidence that crude steel capacity has overtaken and surpassed its pig iron capacity. China also depends on imports for substantial amounts of scrap because its industrial sector is still too young to generate much scrap.

Since 1965, when most of the Soviet-designed construction projects were finally completed, China has looked to the Free World for steel technology and has imported nearly \$100 million worth of metallurgical equipment, including sheet and tube mills, heat treating and soaking furnaces, ore beneficiation plants, and equipment for basic oxygen converters.

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### Petroleum

With the discovery and exploitation of large new oilfields, China has become self-sufficient in petroleum and may even be able to export appreciable quantities of crude oil by the mid-1970s.

The priority growth of the petroleum industry has eliminated what was once believed to be a major vulnerability in China's strategic position. Whereas China could supply less than half its needs from domestic resources in the 1950s, by 1965 it was essentially self-sufficient in petroleum products. Output of crude oil has almost quadrupled over the last decade - from 4.6 million tons in 1960 to an estimated 18 million tons in 1970 - and refining capacity has more than kept pace. In spite of this rapid expansion, China is not a major producer by world standards - for example, China's total annual production would satisfy the needs of the Japanese economy for only about 28 days.

The center of gravity of the industry has shifted markedly under the Communists from the remote northwest to the industrialized northeast. The Ta-ch'ing oilfield in the northeast now provides about 60% of China's crude oil. Other major producers are the older Karamai and Yu-men oilfields in the northwest and the Sheng-li oilfield in Shantung Province in the east. Offshore fields are under investigation or development in order to acquire new sources of supply.

China now is able to produce a complete range of petroleum products and is moving gradually into the production of petroleum-based chemical products. The effect of all these developments on the rest of the economy has been most apparent in the substantial increase since 1965 in petroleum-powered vehicles for military and civilian use - aircraft, trucks, tractors, and ships.

Production of crude oil in 1975 could reach 40 million tons. After satisfying military requirements, as well as the needs of industry, agriculture, and transportation, the Chinese may have as much as 10 million tons available for export. At present world prices, this quantity would bring in \$250 million a year, a useful addition to China's present limited array of exports and a substantial contribution to its earnings of hard currencies. Japan, with its skyrocketing need for raw materials, is a logical customer. Sales to various less developed countries also would be possible and would contribute to China's political stature. Western Europe is a less promising market because of high transportation costs.

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### Military Production

The industrial sector is supplying a rapidly expanding volume of equipment to all branches of the armed forces.

In addition to surface-to-air missiles and short-range naval cruise missiles, the Chinese have produced an unknown number of MRBMs and IRBMs. They are also working on an ICBM program.

The Chinese are gradually strengthening their air force by the production of Soviet-designed aircraft as well as a native-design fighter bomber. Production in 1971 probably will include more than 500 MIG-19 jet fighters, some MIG-21s, about two dozen TU-16 jet bombers, and more than 100 of the new F-9 jet fighter bomber.

Construction of naval weapons to date has been largely based on Soviet systems. These include cruise-missile equipped destroyers, guided missile patrol boats, and torpedo attack submarines. The Chinese have constructed a large modern, native-designed attack submarine which is probably nuclear-powered. They may also be developing a ballistic missile submarine of their own design.

Production of ground weapons includes substantial quantities of small arms, artillery, medium tanks, and ammunition.

In addition to armaments production, the Chinese economy contributes a heavy volume of construction activity to the military effort, e.g., the construction of shipyards, missile test sites, military bases, and airfields — many with extensive underground facilities; the strengthening and extension of road and rail transport routes in strategic areas; the building of costly nuclear weapons production facilities in remote areas; and the construction of air-raid shelters in the cities.

The resources used in defense include a large share of China's top-level scientists, engineers, and plant managers and much of the modern machinery produced at home or imported from Japan and Western Europe. In turn, the armed forces provide support to the general economy by supplying men and trucks at harvest time, building roads and railroads, training a continuing stream of recruits in valuable technical skills, and growing much of their own food on army farms.

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### Industrial Technology

China's rapid advance in industrial technology has still left China far behind the leading industrial nations.

In the 1950s the USSR supplied the equipment and technical support for the construction of about 150 modern industrial plants, including steel mills, electric powerplants, machine tool plants, and armaments plants. About 10,000 Soviet engineers, technicians, and production managers served tours in China, and thousands of Chinese scientists and technicians were trained in the USSR.

The abrupt withdrawal of Soviet technicians in mid-1960, combined with the calamitous Leap Forward (1958-60), brought to a halt this progress in industrial technology. After the Leap was abandoned, China turned to Japan and Western Europe for modern machinery and technology with emphasis on technology in the iron and steel, chemical, electronics, and machinebuilding industries. The subsequent advance in industrial technology was again delayed by the political turmoil of the Cultural Revolution (1966-69).

In addition to the foreign sources of technology, China has benefited from the extensive training and on-the-job experience of tens of thousands of its own young scientists, engineers, and plant managers. Today, the level of industrial technology lags behind the technology of Japan and Western Europe from 5 to 20 years or more depending on China's industrial priorities. Furthermore, within each industry, there is a striking contrast between large modern plants and local plants which use primitive methods and large numbers of unskilled workers. Peking preaches a doctrine of self-reliance in technology, yet China must continue to rely on Japan and Western Europe for much of its modern technology in the 1970s.

A special problem concerns the replacement of the 200 Western-trained scientists and engineers, now in their 50s, who have pioneered China's nuclear and missile and other high-priority programs. The on-going Maoist revolution in education, with its emphasis on manual labor and the curtailment of theoretical academic training, conceivably could block the development of the most promising young technical people. The government, however, is exempting a small number of talented youths from the manual labor requirements and is believed to assign these youths to technical institutes to work under top scientists.

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### Transportation

Rail transport is predominant in the modern sector of China's economy, with water and road transport playing important supplementary roles.

Railroads have borne the burden of increased economic activity, particularly in industrial areas such as northeast China. Since 1950 the Chinese have added more than 11,000 miles of main and branch lines to the railroad network, which now totals about 25,000 miles, as shown on the map. Chinese railroad construction has concentrated on correcting the uneven distribution of the rail system. A striking example is the line linking Ch'eng-tu in Szechwan directly with K'un-ming in Yunnan. This line was recently completed after more than a decade of high-cost construction through rugged mountainous terrain. Although China's railroad system is primarily steam-powered, diesel locomotives have been introduced at an increasing rate since 1965. China is presently experiencing the revolution in railroad motive power completed in Western countries more than 10 years ago.

The Chinese road network totals more than 300,000 miles, about six times the length of serviceable roads in 1949. More than half the system consists of natural earth roads; the remainder is made up primarily of gravel roads and a few thousand miles of bituminous-bound and hard-surface roads. In most sections, truck transport provides short-haul service to the railroads and inland waterways. Motor trucks are supplemented for local haulage by large inputs of such primitive native transport means as wagons, carts, pack animals, and coolie porters. The quality of China's roads does not permit extensive long-distance truck haulage, except in the west where railroads do not exist.

China's navigable inland waterways total more than 100,000 miles; routes on streams suitable for modern motorized vessels amount to some 25,000 miles. Inland waterways supplement the railroads and carry bulk cargoes for long distances when speed is not of major importance. Navigation on the Yangtze River - historically the great commercial artery of China - has steadily improved. Oceangoing vessels can sail as far inland as Wu-han, while junks, barges, tugs, and large river steamers sail as far as Ch'ung-ch'ing. The dense network of waterways in the populous eastern third of China provides low-cost local haulage for an infinite variety of foodstuffs and industrial goods.

Civil aviation is of minor importance in China. Air cargo is characteristically made up of high-value, low-volume items such as expensive machinery needed at remote construction sites or medical supplies required on an emergency basis. Passengers are mostly government officials and foreign visitors.

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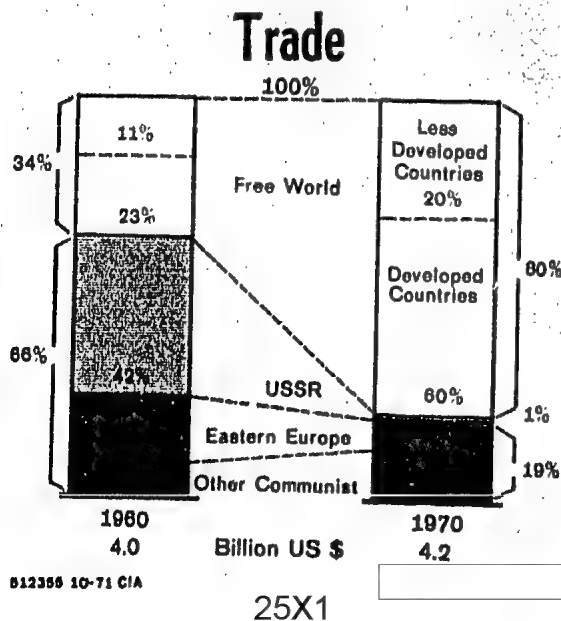
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**SECRET****III. CHINA'S ROLE IN THE WORLD ECONOMY**Foreign Trade

China's foreign trade, rigidly planned by the central government and controlled through a handful of state trading corporations, effectively supports China's industrial and agricultural goals.

The total trade volume of \$4.2 billion is small in relation to domestic output, partly because a vast country such as China can produce a wide variety of products for its own use and partly because so much of China is a subsistence agriculture economy. Nonetheless, for some items – grain, chemical fertilizer, steel, rubber, and certain nonferrous metals and transport equipment – China ranks as an important purchaser; its practice of giving single large contracts increases the impact on individual Western firms and even individual countries.

China has made selective use of trade as a political tool, most recently in placing all its wheat import business with Canada, leaving none for Australia. On the other hand, Japan – China's largest, most convenient, and least-cost trading partner – has been increasing its primacy in China's trade in spite of festering political problems. And West Germany sells more to China than the United Kingdom or France despite the absence of formal diplomatic relations.



In the first decade under the Communists, China's total trade grew steadily from \$1.2 billion in 1950 to \$4.3 billion in 1959; in the second decade the trend has been cyclical, with trade dropping off after the collapse of the Leap Forward and during the Cultural Revolution and regaining the 1959 level only in 1966 and again in 1970. Trade in 1971 should move up to a new peak. Along with these fluctuations in the volume of trade there has been a dramatic shift in China's trading partners. In 1970, some 80% of China's trade was with the Free World; a decade earlier almost two-thirds was with the Communist countries, with the USSR being the pre-dominant partner.

China exports foodstuffs, textiles, unprocessed agricultural materials, and an

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increasing range of miscellaneous manufactures in exchange for machinery and equipment, grain, chemical fertilizer, metals, and other industrial materials. China's trade in 1969, by commodity category, is given below:

	Million US \$	
	Exports	Imports
<i>Total</i>	<i>2,020</i>	<i>1,835</i>
Foods	615	350
Crude materials	450	310
Chemicals	90	310
Textiles	500	30
Metals	70	465
Machinery and equipment	25	240
Other manufactures	270	130

Machinery and transport equipment for China's industrial modernization come from Japan, Western Europe, and Eastern Europe. Japan and Western Europe supply the more advanced technology and also most of China's imports of steel and chemical fertilizer. Canada and Australia have been China's grain suppliers, with occasional shipments by France. Principal imports from the Free World less developed countries include rubber from Malaysia, Singapore, and Ceylon; copper from Zambia, Chile, and Peru; and textile fibers from Pakistan, the United Arab Republic, and East Africa.

Hong Kong and the countries of Southeast Asia with sizable Chinese populations buy large quantities of specialty foods, cotton textiles, and light manufactures. This area provides China with hard currency earnings to finance the substantial deficits in trade with the developed countries of the Free World. For example, China's trade surplus with Hong Kong was \$355 million in 1970. In addition, China obtained another \$175 million from remittances handled by the Hong Kong banks from Chinese residing abroad and from business and investment profits remitted back to the Mainland.

China has followed a conservative international financial policy and is free of long-term international debt. China's reserves of gold and foreign exchange now amount to more than \$700 million. Short-term commercial credits have been extensively used to finance imports of Western grain and fertilizer. Repayments have been prompt and outstanding short-term indebtedness was about \$350 million at the end of 1970.

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**SECRET**Foreign Aid

China maintains a sizable foreign economic and military aid program in selected Communist and non-Communist countries at an annual cost of roughly \$400 million a year.

North Vietnam is the largest single recipient of China's foreign aid, having received by the end of 1970 \$660 million in military aid and \$945 million in economic aid. Military and economic aid to North Vietnam have each been running at about \$95 million a year in 1968-70. Military aid is made up primarily of small arms and ammunition; economic aid of foodstuffs, clothing, coal, and trucks.

China also is a source of aid to insurgent movements in Southeast Asia - for example, the Pathet Lao in Laos and the Communist guerrilla forces in northwest Thailand - but compared to its aid to North Vietnam, Chinese commitments to these other movements are small. In an endeavor to foster independence of the Soviet Union, China also has furnished large-scale economic and military aid to Albania since 1961 and has recently entered into aid agreements with North Korea and Romania. As for Cuba, China for the last few years has been buying Cuban sugar at a price that represents a subsidy of roughly \$50 million per year.

In the period 1956-70, China extended a total of \$1.7 billion in economic aid to the Free World less developed countries, mainly in the form of long-term low-interest loans. Only about one-third of this amount has been actually drawn; thus the outpayments have been at an average rate of \$40 million per year. The most spectacular single aid project is the \$400 million railroad to connect Zambia's copper belt with the Tanzanian port of Dar-es-Salaam. In addition to economic aid, China extended by the end of 1970 some \$200 million in military aid to non-Communist countries, of which two-thirds went to Pakistan primarily in the form of jet aircraft and tanks. The chart on the facing page gives further details on China's aid to the less developed countries of the Free World.

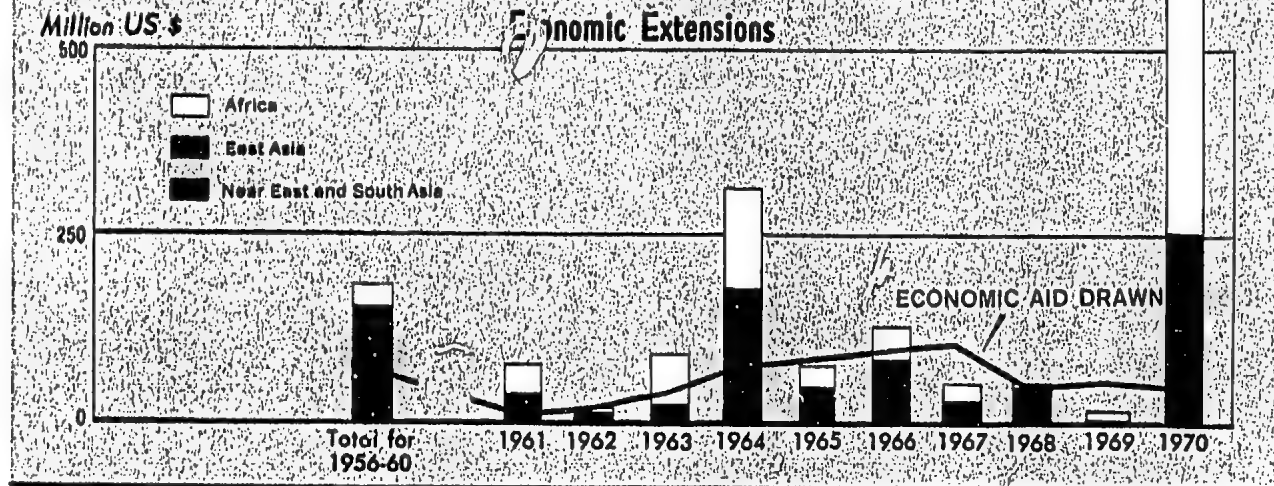
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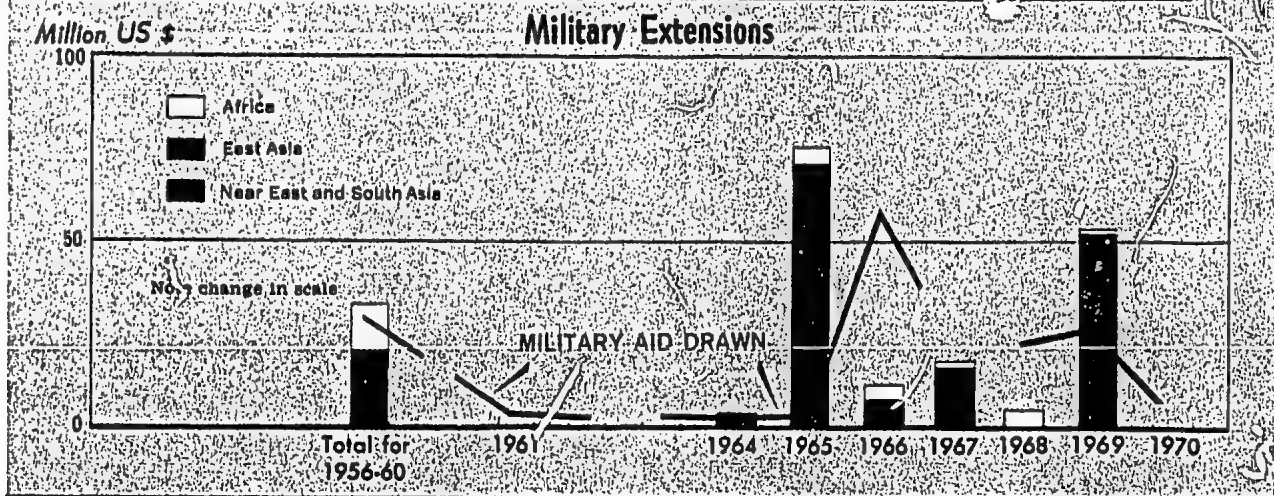
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## Economic and Military Aid to Less Developed Countries of the Free World Extensions and Drawings, by Area

	MILLION US \$										
	TOTAL FOR 1956-60	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
ECONOMIC EXTENSIONS	181.0	76.6	12.3	88.1	310.9	70.7	119.0	49.5	54.3	11.7	708.1
AFRICA	26.5	39.2	1.8	71.6	138.2	24.7	42.5	21.5	0.3	11.5	452.8
EAST ASIA	76.6	27.6				18.0	42.9				
NEAR EAST AND SOUTH ASIA	78.0	9.8	10.5	16.5	172.7	28.0	23.6	28.0	54.0	0.2	255.3
ECONOMIC AID DRAWN	68	5	13	22	65	76	89	94	46	49	45



	MILLION US \$										
	TOTAL FOR 1956-60	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
MILITARY EXTENSIONS	33				4	74	10	17	5	53	
AFRICA	12						7	1	5	1	
EAST ASIA					4	4	3	3			
NEAR EAST AND SOUTH ASIA	21					70		13		52	
MILITARY AID DRAWN	30	3			2	3	56		22	26	6



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**SECRET****US-China Economic Relationships**

Over the next several years, US-China economic relationships are likely to be overshadowed by the political issues between the two powers.

The US embargo on trade with China was lifted in April 1971, permitting commercial transactions between US firms and Chinese trading corporations for the first time in two decades. US importers have moved quickly to initiate certain specialty imports through intermediaries in Hong Kong and other countries. But Peking has been in no rush to expand its trade ties with the United States, indicating that trade expansion with the United States would follow, not precede, the solution of the Taiwan problem, UN membership for Peking, and a US withdrawal from Vietnam. At the same time, China has not been penalizing itself by refusing to purchase equipment embodying advanced US technology. Where advantageous, it has been procuring American goods through subsidiaries of US companies or indirectly through third parties. It also is preparing for direct trade by hinting to US traders that they may be invited to the October 1971 trade fair in Canton.

The potential for US-China trade is limited by several factors. China's foreign trade is small in relation to total output and is likely to grow only slowly because of a policy of economic self-sufficiency, a conservative attitude toward foreign indebtedness, and a limited range of export goods. And China already has well-established trading relationships with low-cost suppliers of its major import needs of grain, fertilizer, and machinery.

Nevertheless, there are obvious possibilities for commercial relations between the two countries. Potential Chinese exports to the United States include specialty foods, crude animal materials such as bristles and feathers, and luxury products such as rugs, embroideries, silks, art objects, and curios. China would have difficulty in achieving large-scale penetration of US markets with its major exports of textiles and staple foodstuffs.

For the near future, China is most likely to be interested in US industrial goods embodying advanced technology and not available from other sources. And the key question for any sale would be whether or not such goods would be licensed for export to China. Advanced computers, petrochemical equipment, and offshore drilling equipment are prime examples of such goods. China may also include US goods in its worldwide search for commercial aircraft, trucks, truck components, and scientific instruments. Finally, China may occasionally purchase US grain, steel, or chemical fertilizers if it wishes to make a political gesture or if it faces greatly increased domestic requirements for these items.

In summary, political uncertainties make any estimate of the future volume of US-China trade highly speculative. Perhaps by the mid-1970s imports and exports might each be in the range of \$100-\$200 million annually.

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**SECRET****Appendix A****Economic Chronology**

- 1949-52:** Rehabilitation: restoration of railroads, factories, and water control systems to operation; provision of stable currency; evening out of food supplies; establishment of economic law and order.
- 1953-57:** First Five-Year Plan: successful Soviet-style plan for building up capacity and production in basic industries - steel, coal, electric power, cement, simple machinery; good start on defense industries; collectivization of agriculture with emphasis on investment from local resources; import of machinery and technology from Communist countries.
- 1958-60:** Great Leap Forward: attempt at instant industrialization through frenzied increase in tempo of industry and agriculture; backyard steel furnaces and other wasteful small industrial projects; unwieldy supercollectives (communes) in agriculture; ban on private plots; breakdown of planning and statistical system; withdrawal of Soviet technicians in mid-1960; poor harvests in 1959, 1960, and 1961; acute food shortages especially in the winter of 1960-61.
- 1961-65:** Readjustment and Recovery: emergency measures to regain tolerable food balance, including annual import of 4-5 million metric tons of grain beginning in 1961, restoration of smaller collective units in agriculture, permissive attitude toward private plots, and increase of industrial inputs to agriculture; shutting down of wasteful industrial production and concentration of industrial investment on weapons, petroleum, electronics, and fertilizer industries; shift of trade from Communist countries to Industrial West.
- 1966-69:** Great Proletarian Cultural Revolution: Maoist attempt to revitalize revolution by reversing trends toward bureaucratization, "expertism," and material incentives; unleashing of youthful Red Guards with subsequent assumption of power by army; damage to industrial production in 1967-68 (down 15%-20%) and foreign trade (down 10% in 1967-68), but little damage to agriculture which had good weather and might even have benefited from lessened control.
- 1970-75:** Resumption of Regular Planning: general trend to political and economic moderation and announcement of Fourth Five-Year Plan for 1971-75; record industrial and agricultural production in 1970; petroleum and armaments industries as pace-setters; release of a few national production figures, possibly foreshadowing lifting of 11-year statistical blackout.

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# Appendix B

## Economic Indicators

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	1952	1957	1958	1959	1960	1961	1962
GDP (billion 1969 US \$)	57	79	91	88	86	69	76
Population, mid-year (million persons)	570	642	658	674	689	701	710
Per capita GDP (1969 US \$)	101	123	139	131	125	99	107
Grain (million metric tons)	154	185	200	185	160	160	175-180
Cotton (million metric tons)	1.3	1.6	1.7	1.5	1.4	0.9	0.9
Industrial production index (1957 = 100)	51	100	130	163	160-162	103-105	106-109
Crude steel (million metric tons)	1.35	3.35	8.0	10	13	8	8
Coal (million metric tons)	66.5	130.7	230	300	280	170	180
Electric power (billion kilowatt hours)	7.3	19.3	27.5	41.5	47	31	30
Crude oil (million metric tons)	0.44	1.46	2.26	3.7	4.6	4.5	5.0
Aluminum (thousand metric tons)	0	39	49	70	80	60	70
Cement (million metric tons)	2.86	6.9	9.3	10.6	9.0	6.0	5.5
Chemical fertilizers (million metric tons of product weight)							
Supply	0.4	1.9	3.0	3.1	3.5	2.4	3.1
Production	0.2	0.8	1.4	1.9	2.5	1.4	2.1
Imports	0.2	1.1	1.6	1.2	1.0	1.0	1.0
Trucks (thousand units)	0	7.5	16.0	19.4	15	1	14
Locomotives (units)	20	167	350	500	600	100	25
Freight cars (thousand units)	5.8	7.3	11	17	23	3	4.0
Cotton cloth (billion linear meters)	3.83	5.05	5.7	7.5	5.8	4.0	4.2
Foreign Trade (billion US \$)							
Total	1.89	3.03	3.74	4.26	3.97	3.02	2.68
Exports	0.88	1.60	1.91	2.20	1.94	1.52	1.53
Imports	1.01	1.43	1.83	2.06	2.03	1.50	1.15

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Appendix B  
Economic Indicators

1953	1954	1955	1956	1957	1958	1959	1960	
79	87	95	104	100	97	107	115	GDP (billion 1969 US \$)
721	735	751	766	783	800	818	836	Population, mid-year (million persons)
110	118	127	136	129	121	131	143	Per capita GDP (1969 US \$)
175-180	180-185	190-195	195-200	210-215	195-200	200-205	215-220	Grain (million metric tons)
0.9	1.3	1.3	1.6	1.8	1.6	1.7	1.7	Cotton (million metric tons)
117-123	133-141	155-165	177-190	142-154	147-162	178-198	208-233	Industrial production index (1957 = 100)
9	10	11	13	10	11.5	14.5	17	Crude steel (million metric tons)
190	200	220	240	190	200	250	300	Coal (million metric tons)
33	36	42	47	41	44	50	60	Electric power (billion kilowatt hours)
5.5	6.9	8	10	10	11	14	18	Crude oil (million metric tons)
85	100	115	125	145	180	195	230	Aluminum (thousand metric tons)
7.3	8.7	10.9	12.0	10.2	10.5	12	13	Cement (million metric tons)
								Chemical fertilizers (million metric tons of product weight)
4.9	4.7	6.8	8.0	8.3	8.8	9.9	11.8	Supply
2.9	3.5	4.5	5.5	4.0	4.8	5.8	7.0	Production
2.0	1.2	2.3	2.5	4.3	4.0	4.1	4.8	Imports
16	26	34	47	34	31	66	75	Trucks (thousand units)
25	25	50	140	200	240	260	280	Locomotives (units)
5.9	5.7	6.6	7.5	6.9	8.7	11	12	Freight cars (thousand units)
4.5	4.9	5.4	6.0	4.8	4.8	6.5	7.5	Cotton cloth (billion linear meters)
								Foreign trade (billion US \$)
2.77	3.22	3.85	4.20	3.84	3.71	3.86	4.25	Total
1.57	1.75	2.00	2.17	1.92	1.89	2.02	2.07	Exports
1.20	1.47	1.86	2.03	1.94	1.82	1.84	2.18	Imports

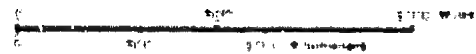
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Appendix C

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Terrain



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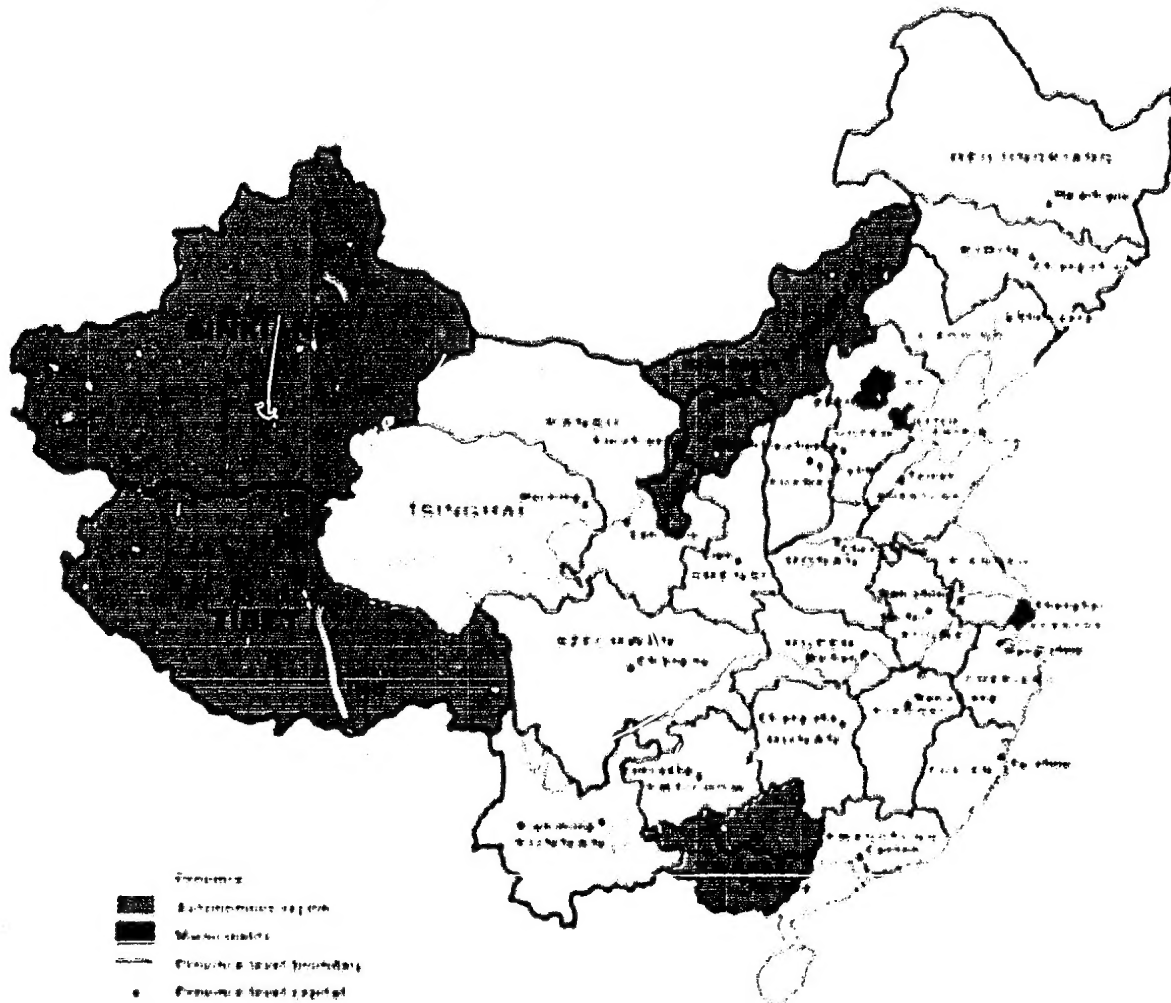
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Appendix D

## Province-level Administrative Divisions



Scale bar: 0 100 200 Kilometers



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**Appendix E**

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**QUESTIONS FREQUENTLY ASKED ABOUT THE CHINESE ECONOMY**

**Q.** Is China likely to spill across its boundaries to seize the "rice bowl" area of Southeast Asia?

**A.** No. The rice surplus in this area at the most is 5 million tons, which is only 2%-3% of China's current grain production. Furthermore, if the Chinese took the area, the surplus could well vanish because of disrupted incentives; at the minimum, the surplus could not be procured and transported cost-free. Finally, China could obtain 5 million additional tons of grain at much less risk and cost by other means - for example, by buying additional grain or fertilizer abroad or by reallocating resources at home. Of course, China's leadership could move into Southeast Asia for political or military reasons or because of an erroneous assessment of the economic issues involved.

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**Q.** Are the Chinese people better off economically under the Communist government than they were before 1949?

**A.** Yes. With the exception of 1960-61, the Chinese have had enough to eat since the Communists came to power, and the stability of economic life has been greatly improved because of the elimination of large-scale famine, inflation, brigandage, civil war, and epidemics as well as of the marked reduction in the effects of flood and drought. The majority of the people lead more secure lives, economically speaking. The 5%-10% of the people at the top in pre-Communist days fled the country, were killed, or were dispossessed.

**Q.** Is the distribution of income egalitarian under the Chinese Communists?

**A.** Yes. The distribution of income and perquisites is more nearly equal than in any other major country. Distinctions in pay, dress, mode

**SECRET****Appendix E**

of transport, and life style are surprisingly small between the average worker and the plant manager. Party members are enjoined to live frugally, and opportunities for conspicuous consumption are few. The Cultural Revolution was launched by Mao in part because he thought the cadres were losing this egalitarian spirit.

**Q. Does Communist China have an inflation problem?**

**A. No.** Prices, wages, and rents in the modern part of the economy are fixed by government fiat and effectively enforced. In the countryside, much economic activity is contained within the household and another large share is conducted on a barter basis. The "share-out" of the crop at the end of the harvest season is largely in kind. Still another part of rural output goes for taxes paid in kind to the government or as a quota sold to the government at fixed prices. Inputs of fertilizer and equipment are paid for by the collective unit at fixed prices. Local markets may have fluctuating prices, but buying for resale is prohibited and prices far out of line normally would be the subject of official action.

**Q. How do the Chinese manage to have a balanced foreign trade account?**

**A. State foreign trade corporations** are authorized to contract for only those goods which are covered by export earnings. When exports falter, as happened during the Cultural Revolution, imports are correspondingly tightened. The trade with individual nations does not necessarily balance - for example, China uses its large trade surplus with Hong Kong and Southeast Asia to cover its trade deficits with Japan, Canada, and Western Europe.

**Q. How have the Chinese Communists eradicated the opium problem?**

**A. Stringent controls over opium poppy production and use** were adopted at the 21st session of the State Council on 24 February 1950. Basically the statute prohibited the private importation, processing, and sale of opium and other narcotics. However, government controlled production continues and is reflected in the small quantities of raw opium and poppy husks which are legally exported from time to time. The tight political control exercised by the government over its citizens has probably made the enforcement of these laws quite effective in most areas of the country.

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Control over production and trade in the southern border areas has probably been more difficult, and scattered reports in recent years indicate that small amounts of illicit opium are produced and traded in the tribal areas of the south.

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**Appendix F**  
**International Economic**  
**Comparisons, 1970**

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	<u>China</u>	<u>Taiwan</u>	<u>India</u>	<u>Japan</u>	<u>USSR</u>	<u>US</u>
Land area (million square miles)	3.7	0.014	1.2	0.14	8.6	3.6
Cultivated (percent)	11	24	50	16	9	20
Forested (percent)	8	55	22	69	37	32
Population, mid-year (million persons)	836	15	350	104	243	205
Average annual increase (percent)	2.2	2.3	2.5	1.0	0.9	1.1
GNP (billion 1969 US \$)	119	5	47	186	508	928
Imports (billion US \$)	2.18	1.52	2.15	18.9	11.7	40.0
Exports (billion US \$)	2.07	1.56	1.96	19.3	12.8	42.6
Grain production (million metric tons)	215-220	6	83	16	150	186
Industrial production index (1965 = 100)	138	222	117	215	139	117
Hard coal (million metric tons)	300	4	72	40	441	539
Electric power (billion kilowatt hours)	60	13	62	349	740	1,760
Crude oil (million metric tons)	18	0.09	7	0.8	353	475
Crude steel (million metric tons)	17	0.3	6	93	116	119
Cement (million metric tons)	13	4	14	57	95	68
Railroads (thousand miles)	25	3	36	18	86	224
Highways (thousand miles)	325	10	590	622	934	3,698
Telephones in use (millions)	0.2	0.3	1.2	23.1	13.0	122.0
Radios in use (millions)	8.5	1.4	9.3	23.2	49.1	336.0

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